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## What is claimed is:

A multiple item user preference information data structure for multi-media information provided from an information provider comprising:

single item user preference information for single items related to the multi-media information; and

multiple items user preference information for multiple items formed by combining the single items.

2. The data structure according to claim 1, wherein the single item user preference information comprising:

a user preference item identifier which denotes the item to describe user's preference; and

an item preference level indicating the degree of user preference, corresponding to the user preference to the user preference item identifier.

3. The data structure according to claim 1, wherein the multiple item user preference information comprising:

a user preference item identifier which is combination of single user preference items; and

an item preference level indicating the degree of user preference, corresponding to the user preference to combinations of the user preference item identifiers.

4. The data structure according to claim 2 or 3, wherein the item

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preference level is one of levels divided into a plurality of levels between levels preferred by a user and levels not preferred by the user.

- 5. The data structure according to claim 1, wherein the single item user preference information and the multiple items user preference information are stored in non-volatile memory of a system installed for an information provider and/or an information user.
  - 6. The data structure according to claim 1, wherein the single item user preference information and the multiple items user preference information are stored in portable non-volatile memory such as smart card.

A method for providing multi-media information in which a multi-media is provided from the information provider to users in a user's desired environment, comprising the steps of:

setting user preference information for the multi-media information;

searching the multi-media information according to the user preference information; and

providing users with generated multi-media information according to the searching result.

8. The method according to claim 7, wherein the user preference information comprising:

single item user preference information for single items related to the multi-media information; and

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multiple items user preference information for multiple items formed by combining the single items.

9. The method according to claim 8, wherein the single item user preference information comprising:

a user preference item identifierwhich denotes the item to describe user's preference; and

an item preference level indicating the degree of user preference, corresponding to the user preference to the user preference item identifier.

10. The method according to claim 8, wherein the multiple items user preference information comprising

a user preference item identifier which is combinations of single user preference items; and

an item preference level indicating the degree of user preference, corresponding to the user preference to combinations of the user preference item identifiers.

- 11. The method according to claim 8, wherein in the step of searching multi-media information, in case that there exist a single item and a multiple items together, a weight value is applied to each of the single item and the multiple items and the multi-media information is searched depending on the order of priority according to their weight value.
  - 12. The method according to claim 8, wherein the user preference

information is recorded in non-volatile memory of a system installed for the information provider or an information user.

13. The method according to claim 8, wherein the user preference information is recorded in a memory of a system installed in portable non-volatile memory such as smart card.